

In the Claims

1. (currently amended) A method of controlling an allocation of packet transmission priority to TCP packets within a switch to transmit the packets thereover, said method comprising:

- a) determining whether a packet passing through said switch to be transmitted is a TCP control packet;
- b) assigning, within the packet, a packet transmission priority to such determined TCP control packets that is different to the priority of TCP data packets that such TCP control packets control.

2. (previously presented) A method as in claim 1 in which step (a) of determining whether the packet is a control packet comprises checking flag bits within the TCP header and establishing if any flag other than the PSH flag bit is set.

3. (currently amended) A method as in claim 2 in which packets having a flag bit other than PSH set are assigned an increased priority of packet transmission relative to those with the ~~PHS flag~~ PSH flag bit set.

4. (currently amended) A switch including:

logic for snooping a TCP header in a TCP packet being transmitted through said switch and establishing whether said TCP packet is a TCP control packet; and

means for assigning, within the packet, a packet transmission priority to said TCP packet dependent on whether it is a TCP control packet.

5. (previously presented) A switch as in claim 4 in which the logic for snooping the TCP header checks the flag bits within the TCP header and establishes whether any flag other than a PSH flag bit is set.

6. (previously presented) A switch as in claim 4 in which said means for assigning allocates an increased packet transmission priority to TCP packets having a flag bit other than PSH set.

7. (currently amended) A switch for the reception and transmission of TCP packets including both control packets and non-control packets each having a header conforming to the Transport Control Protocol (TCP), said switch including:

a multiplicity of ports for receiving and transmitting said TCP packets;

means for allocating a packet transmission priority to TCP packets within said switch as they are being transmitted;

means for checking flag bits within the header of each of said TCP packets to determine whether a given TCP packet is a TCP control packet; and

means for assigning, within the packet, a packet transmission priority to said given TCP packet dependent on whether it is a TCP control packet.

8. (previously presented) A switch as in claim 7 in which:

said means for checking includes logic for snooping the TCP header to establish whether any flag in said header other than a PSH flag bit is set; and

said means for assigning allocates an increased packet transmission priority to TCP packets having a set flag bit other than said PSH flag bit.